

CLAIMS:

What is claimed is:

1. A perioperative multivitamin protein beverage for promoting an anabolic state in a person, wherein the protein beverage comprises:
 - 5 a. from about 250 mg to about 2500 mg a digestive enzyme selected from the group consisting of bromelain, pepsin, amylase, protease, lipase, cellulase, lactase, alpha-g, glucoamylase, invertase, malt diastase, pectinase, xylanase, bromelain, betain, and trypsin, and combinations thereof;
 - b. from about 50 mg to about 2500 mg of an amino acid;
 - 10 c. from about 200 mg to about 2000 mg of a sea plant selected from the group consisting of kelp, blue green algae, sea vegetables, sea weed, cholorella, spirulina, wheat grass, barley grass, other non-toxic leafy plants from the sea, and combinations thereof;
 - d. from about 10 mg to about 8000 mg of a flavoring;
 - 15 e. from about 100 mg to about 2500 mg of a vitamin selected from the group consisting of Vitamin A, Vitamin B, Vitamin D, Vitamin E, Vitamin K, calcium, complexes thereof, and combinations thereof;
 - f. from about 1000 mg to about 9000 mg of a fiber; and
 - g. an ingestible fluid.
- 20 2. The perioperative multivitamin protein beverage of claim 1, wherein the protein is selected from the group consisting of a whey protein, soy protein, sodium casienate protein, legume protein, egg protein, and combinations thereof.
3. The perioperative multivitamin protein beverage of claim 1, further comprising from about 10 mg to about 20 mg of a fat.

4. The perioperative multivitamin protein beverage of claim 3, wherein the fat is selected from the group consisting of a saturated fat, a polysaturated fat, a monosaturated fat, a polyunsaturated fat, and combination thereof.
- 5 5. The perioperative multivitamin protein beverage of claim 1, further comprising an essential fatty acid derived from a member of the group consisting of pumpkin seed, almonds, sesame seeds, walnuts, flax seed, soy bean derivatives, and combinations thereof.
6. The perioperative multivitamin protein beverage of claim 1, further comprising from about 250 mg to 5000 mg of an artificial sweetener or a sugar.
- 10 7. The perioperative multivitamin protein beverage of claim 6, wherein the artificial sweetener is selected from the group consisting of aspartame, saccharine, calcium saccharine, and combinations thereof.
8. The perioperative multivitamin protein beverage of claim 6, wherein the sugar is selected from the group consisting of dextrose, maple sugar, cane sugar, beet sugar, fructose, sucrose, and combinations thereof.
- 15 9. The perioperative multivitamin protein beverage of claim 1, wherein said flavorings comprises: a raspberry flavoring, chocolate flavoring, vanilla flavoring, strawberry flavoring, apple flavoring, citrus flavoring, kiwi flavoring, banana flavoring, coconut, caramel flavoring, grape flavoring, blueberry flavoring, peanut, almond flavoring, tart cherry flavoring, coffee flavoring, cinnamon, ginger, nutmeg, clove, ginger, peach flavoring, pear flavoring, other herbs, and combinations thereof.
- 20 10. The perioperative multivitamin protein beverage of claim 1, wherein the Vitamin A is beta carotene.
11. The perioperative multivitamin protein beverage of claim 1, wherein the Vitamin B is selected from the group consisting of Vitamin B1, Vitamin B3, Vitamin B5, Vitamin B6, Vitamin B-12, and combinations thereof.
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12. The perioperative multivitamin protein beverage of claim 1, Vitamin E is selected from the group consisting of tocopherol, tocopheryl tocopheryl acetate, d-alpha tocopherol, d-alpha tocopheryl acetate, d-alpha tocopheryl succinate, complexes thereof, and combinations thereof.
- 5 13. The perioperative multivitamin protein beverage of claim 1, wherein the fiber is a grain or a flax seed.
14. The perioperative multivitamin protein beverage of claim 13, wherein the grain is selected from the group consisting of a corn, a rice, a wheat, a barley, oats, quinoa, and combinations thereof.
- 10 15. The perioperative multivitamin protein beverage of claim 1, further comprising from about 1 mg to about 20 mg of a digestive enzyme.
16. The perioperative multivitamin protein beverage of claim 1, further comprising from about 250 mg to about 500 mg of calcium.
- 15 17. The perioperative multivitamin protein beverage of claim 1, wherein the ingestible fluid is a member selected from the group consisting of water, coffee, tea, artificial drinks, alcoholic fluids, non-alcoholic fluids, fruit juice, vegetable juice, blends of juice, juice and water blends, concentrates of juice, soda, sports drink, and combination thereof.
- 20 18. The perioperative multivitamin protein beverage of claim 1, wherein the amino acids are selected from the group consisting of tryptophan, lysine, methionine, phenylalanine, threonine, valine, leucine & isoleucine, arginine, tyrosine, glycine, serine, glutamic acid, aspartic acid, taurine, cystine, histidine, proline, alanine, and combinations thereof.
- 25 19. A method for improving immune systems and promote detoxification in a subject in need thereof comprising the step of administering to the subject a dosage amount of the perioperative multivitamin protein beverage of claim 1 and administering the dosage amount twice daily.

20. A perioperative multivitamin protein additive for promoting an anabolic state in a person, wherein the protein additive comprises:
- a. from about 250 mg to about 2500 mg a digestive enzyme selected from the group consisting of bromelain, pepsin, amylase, protease, lipase, cellulase, lactase, alpha-g, glucoamylase, invertase, malt diastase, pectinase, xylanase, bromelain, betain, and trypsin, and combinations thereof;
 - b. from about 50 mg to about 2500 mg of an amino acid;
 - c. from about 200 mg to about 2000 mg of a sea plant selected from the group consisting of kelp, blue green algae, sea vegetables, sea weed, cholorella, spirulina, wheat grass, barley grass, other non-toxic leafy plants from the sea, and combinations thereof;
 - d. from about 10 mg to about 8000 mg of a flavoring;
 - e. from 100 mg to 2500 mg of a vitamin selected from the group consisting of Vitamin A, Vitamin B, Vitamin D, Vitamin E, Vitamin K and calcium, complexes thereof, and combinations thereof; and
 - f. from about 1000 mg to about 9000 mg of a fiber.
21. The perioperative multivitamin protein additive of claim 20, wherein the protein is selected from the group consisting of a whey protein, soy protein, sodium casienate protein, legume protein, egg protein, and combinations thereof.
22. The perioperative multivitamin protein additive of claim 20, further comprising from about 10 mg to about 20 mg of a fat.
23. The perioperative multivitamin protein additive of claim 22, wherein the fat is selected from the group consisting of a saturated fat, a polysaturated fat, a monosaturated fat, a polyunsaturated fat, and combination thereof.

24. The perioperative multivitamin protein additive of claim 20, further comprising an essential fatty acid derived from a member of the group consisting of pumpkin seed, almonds, sesame seeds, walnuts, flax seed, soy bean derivatives, and combinations thereof.
- 5 25. The perioperative multivitamin protein additive of claim 20, further comprising from about 250 mg to 5000 mg of an artificial sweetener or a sugar.
26. The perioperative multivitamin protein additive of claim 25, wherein the artificial sweetener is selected from the group consisting of aspartame, saccharine, calcium saccharine, and combinations thereof.
- 10 27. The perioperative multivitamin protein additive of claim 25, wherein the sugar is selected from the group consisting of dextrose, maple sugar, cane sugar, beet sugar, fructose, sucrose, and combinations thereof.
28. The perioperative multivitamin protein additive of claim 20, wherein said flavorings comprises: a raspberry flavoring, chocolate flavoring, vanilla flavoring, strawberry
15 flavoring, apple flavoring, citrus flavoring, kiwi flavoring, banana flavoring, coconut, caramel flavoring, grape flavoring, blueberry flavoring, peanut, almond flavoring, tart cherry flavoring, coffee flavoring, cinnamon, ginger, nutmeg, clove, ginger, peach flavoring, pear flavoring, other herbs, and combinations thereof.
29. The perioperative multivitamin protein additive of claim 20, wherein the Vitamin A is
20 beta carotene.
30. The perioperative multivitamin protein additive of claim 20, wherein the Vitamin B is selected from the group consisting of Vitamin B1, Vitamin B3, Vitamin B5, Vitamin B6, Vitamin B-12, and combinations thereof.
31. The perioperative multivitamin protein additive of claim 20, wherein the Vitamin E is
25 selected from the group consisting of tocopherol, tocopheryl tocopheryl acetate, d-alpha tocopherol, d-alpha tocopheryl acetate, d-alpha tocopheryl succinate, complexes thereof, and combinations thereof.

32. The perioperative multivitamin protein beverage of claim 20, wherein the fiber is a grain or a flax seed.

33. The perioperative multivitamin protein beverage of claim 32, wherein the grain is selected from the group consisting of a corn, a rice, a wheat, a barley, oats, quinoa, and combinations thereof.

34. The perioperative multivitamin protein additive of claim 20, further comprising a nutritional grain selected from the group consisting of a rice, a wheat, a barley, oats, quinoa, and combinations thereof.

35. The perioperative multivitamin protein additive of claim 20, further comprising from about 1 mg to about 20 mg of a digestive enzyme.

36. The perioperative multivitamin protein additive of claim 20, further comprising from about 250 mg to about 500 mg of calcium.

37. The perioperative multivitamin protein additive of claim 20, wherein the amino acids are selected from the group consisting of tryptophan, lysine, methionine, phenylalanine, threonine, valine, leucine & isoleucine, arginine, tyrosine, glycine, serine, glutamic acid, aspartic acid, taurine, cystine, histidine, proline, alanine, and combinations thereof.